



IN THE CLAIMS

Please amend the claims as follows:

Claims 1-26 (Canceled).

Claim 27 (New): A process for producing a three-dimensional object by providing a layer of a pulverulent substrate and use of lasers,

characterized in that

an absorber in a suspension or a liquid absorber is selectively applied via an inkjet process to the regions to be sintered, and selective melting of regions of the powder layer takes place by means of introduction of electromagnetic energy via a laser whose wavelength is from 100 to 3000.

Claim 28 (New): The process for producing a three-dimensional object as claimed in claim 27, characterized in that it comprises

the steps of

a) providing a layer of a pulverulent substrate
b) controlling the temperature of the manufacturing chamber
c) selective application of an absorber in a suspension or of a liquid absorber via an inkjet process to the regions to be sintered

d) application of other specific liquids or suspensions with certain properties
e) selective melting of regions of the powder layer by means of introduction of electromagnetic energy via a laser of wavelength from 100 to 3000 nm
f) cooling of the molten and non-molten regions to a temperature which allows the moldings to be removed intact

g) removal of the moldings.

Claim 29 (New): The process as claimed in claim 28,
characterized in that
step e) is first carried out once, and then steps a) to d) are carried out once, and then
step b) is carried out and step a) is carried out again once, and then the other steps are carried
out in the sequence c), d), a), b), and e).

Claim 30 (New): The process as claimed in claim 27,
characterized in that
the pulverulent substrate used has a median grain size of from 10 to 150 μm .

Claim 31 (New): The process as claimed in claim 27,
characterized in that
use is made of a laser of wavelength from 800 to 1070 nm.

Claim 32 (New): The process as claimed in claim 27,
characterized in that
use is made of a laser of wavelength from 1900 to 2100 nm.

Claim 33 (New): The process as claimed in claim 27,
characterized in that
use is made of an Nd:YAG laser.

Claim 34 (New): The process as claimed in claim 27,
characterized in that
use is made of a diode laser.

Claim 35 (New): The process as claimed in claim 27,
characterized in that
use is made of a laser with unfocused, linear or spread beam.

Claim 36 (New): The process as claimed in claim 27,
characterized in that
the absorber comprises colorants.

Claim 37 (New): The process as claimed in claim 36,
characterized in that
the absorber comprises pigments.

Claim 38 (New): The process as claimed in claim 36,
characterized in that
the absorber comprises dyes.

Claim 39 (New): The process as claimed in claim 27,
characterized in that
the absorber comprises carbon black, CHP, animal charcoal, graphite, carbon fibers,
chalk, or interference pigments.

Claim 40 (New): The process as claimed in claim 27,
characterized in that
the absorber comprises other components alongside carbon black, CHP, animal
charcoal, graphite, carbon fibers, chalk, or interference pigments.

Claim 41 (New): The process as claimed in claim 27,
characterized in that
the absorber comprises flame retardants based on phosphorus or melamine cyanurate.

Claim 42 (New): The process as claimed in claim 36,
characterized in that
the absorber also comprises distilled water, or alcohol, or solvent.

Claim 43 (New): The process as claimed in claim 36,
characterized in that
the absorber also comprises a surfactant and/or wetting agent and/or biocide and/or
moisture retainer.

Claim 44 (New): The process as claimed in claim 27,
characterized in that
the pulverulent substrate used comprises polymers.

Claim 45 (New): The process as claimed in claim 27,
characterized in that

the pulverulent substrate used comprises sand, metal particles, or ceramic particles, which have been encapsulated by a polymeric material.

Claim 46 (New): The process as claimed in claim 44,
characterized in that

the polymer is a homo- or copolymer preferably selected from polyester, polyvinyl chloride, polyacetal, polypropylene, polyethylene, polystyrene, polycarbonate, polybutylene terephthalate, polyethylene terephthalate, polysulfone, polyarylene ether, polyurethane, thermoplastic elastomers, polylactides, polyoxyalkylenes, poly(Nmethylemethacrylimides) (PMMI), polymethyl methacrylate (PMMA), ionomer, polyamide, copolyester, copolyamides, silicone polymers, terpolymers, acrylonitrilebutadiene-styrene copolymers (ABS), and mixtures thereof.

Claim 47 (New): The process as claimed in claim 44,
characterized in that

use is made of a pulverulent substrate which comprises from 0.05 to 5% by weight of a powder-flow aid.

Claim 48 (New): The process as claimed in claim 44,
characterized in that

use is made of a pulverulent substrate which comprises inorganic fillers.

Claim 49 (New): The process as claimed in claim 48,
characterized in that

the filler used comprises glass beads.

Claim 50 (New): The process as claimed in claim 44,
characterized in that
use is made of a pulverulent substrate which comprises inorganic or organic pigments.